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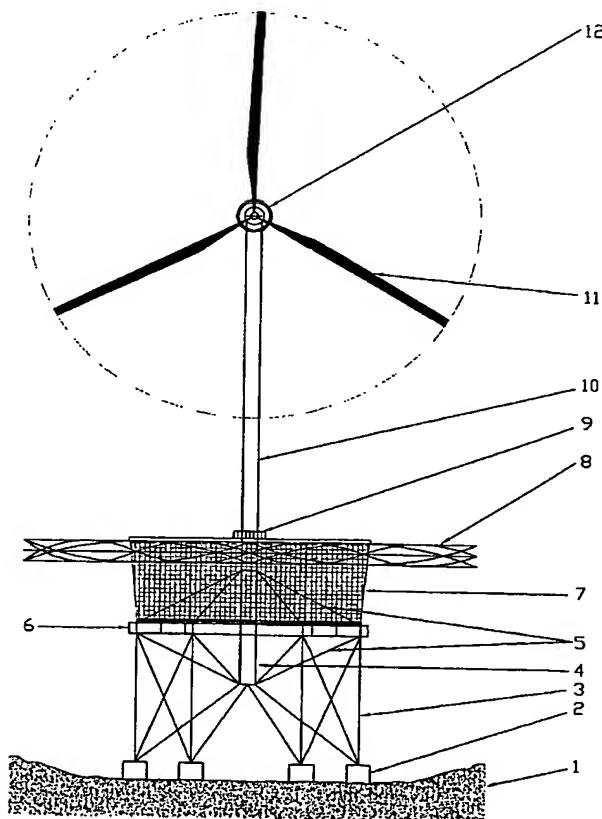
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[Continued on next page]

(54) Title: FLOATING FOUNDATION FOR WIND ENERGY PRODUCTION AND METHODS FOR CONSTRUCTING AND USING ASAID FLOATING FOUNDATIONS



(57) Abstract: The invention refers to a novel submerged floating foundation body (6,13;16) which is mounted to the bottom (1) of the sea or a lake by cables or chains (3) and supporting a structure especially a wind turbine tower (10) below the wave motion area (8). It may have also a mariculture cage (7) on said floating body.



(84) **Designated States (regional):** ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/06011

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 E02B17/00 B63B35/44 F03D1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E02B B63B F03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|---|
| X | GB 849 887 A (CALIFORNIA RESEARCH CORP) 28 September 1960 (1960-09-28) page 8, line 1 - line 17; figure 12 | 1-5,7, 21-27, 29-31,40 |
| P,X | DE 102 19 062 A (SCHOPF WALTER) 13 November 2003 (2003-11-13) paragraph [0034]; figures 1,9 paragraph [0037] paragraph [0066] ----- -/-- | 1-3,7, 11,15, 21-26, 28-30, 32-35, 37,40 |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

 International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| P,X | GB 2 378 679 A (BONE DAVID ;OCEAN TECHNOLOGIES LTD (GB)) 19 February 2003 (2003-02-19) the whole document | 1,11,15, 21,22 |
| X | ----- EP 1 174 336 A (MAIERFORM MARITIME TECHNOLOGY) 23 January 2002 (2002-01-23) figure 2 | 1,11,15, 21,22 |
| X | ----- PATENT ABSTRACTS OF JAPAN vol. 2003, no. 02, 5 February 2003 (2003-02-05) & JP 2002 285951 A (HITACHI Zosen CORP), 3 October 2002 (2002-10-03) abstract | 1,11,15, 21,22 |
| X | ----- PATENT ABSTRACTS OF JAPAN vol. 2003, no. 02, 5 February 2003 (2003-02-05) & JP 2002 285952 A (HITACHI Zosen CORP), 3 October 2002 (2002-10-03) abstract | 1,11,15, 21,22 |
| X | ----- US 4 645 379 A (GAWEL LEN J ET AL) 24 February 1987 (1987-02-24) figures 9,10 | 1,21,22 |
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| | ----- | |

INTERNATIONAL SEARCH REPORT

ional application No.
PCT/IB 03/06011

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7, 11, 15, 21-40

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7,11,15,21-40

A floating foundation, a method of constructing a floating foundation and a method of using a floating foundation

2. claims: 8,9

A method for foundation anchoring

3. claim: 10

A method for stabilising a foundation

4. claim: 12

A method of construction of a suspended platform

5. claim: 13

A method of construction for cranes

6. claim: 14

A method for use of the hollow part of a piled tower

7. claim: 16

A method for a realisation of a submerged floating mariculture installation

8. claim: 17

A method for automatic feeding of fish species

9. claim: 18

A method for attaching submerged cages to a foundation

10. claim: 19

A method for fish harvesting and maintenance of submerged cages

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

11. claim: 20

A combination of innovative techniques

INTERNATIONAL SEARCH REPORT

Information on patent family members

Application No

PCT/IB 03/06011

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